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**UniSourceEnergy**  
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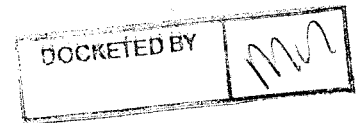
March 31, 2010

Steve Olea  
Director, Utilities Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Arizona Corporation Commission  
**DOCKETED**

MAR 31 2010

Re: Docket No. E-04204A-06-0783, Decision No. 70360



Mr. Olea,

Pursuant to Decision No. 70360 (May 27, 2008) UNS Electric, Inc. ("UNS Electric") is required to submit semi-annual Demand-Side Management ("DSM") program progress reports on April 1<sup>st</sup> and October 1<sup>st</sup> of each year in accordance with Arizona Corporation Commission Staff's recommendations. Enclosed please find UNS Electric's Semi-Annual DSM Program Progress Report for the reporting period of July 1, 2009 through December 31, 2009. Attached to the DSM Program Progress Report are the Memos of Understanding ("MOU") with the CFL manufacturers and retailers as required by Decision No. 70556 (October 23, 2008). The marketing materials for the reported DSM programs are being filed directly with Commission Staff on the attached CD.

The MOUs contain confidential information and are being provided to Staff pursuant to the terms of the Protective Agreement executed in Docket No. E-04204A-06-0783.

Also enclosed is an additional copy that the Company requests you to date-stamp and return in the self-addressed, stamped envelope for our files.

If you have any questions, please contact me at (520) 884-3680.

Sincerely,

Jessica Bryne  
Regulatory Services

Enclosures: Report and CD

cc: Docket Control, ACC (w/o CD)  
Julie McNeely-Kirwan, ACC (with CD)  
Compliance, ACC (w/o CD)  
Shannon Kanlan, ACC (w/o CD)

ACC CORP COMMISSION  
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**UNS Electric, Inc**

**Semi-Annual DSM Program  
Progress Report**

**July – December 2009**

## **UNS Electric, Inc.**

### **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009**

This progress report includes the following information for all UNS Electric, Inc. ("UNS Electric" or the "Company") Demand-Side Management ("DSM") programs that were in place during this reporting period, including programs for residential, non-residential, and low-income customers:

- A brief description of the program;
- Program modifications;
- Program goals, objectives, and savings targets;
- Programs terminated;
- The levels of participation;
- A description of evaluation and monitoring activities and results;
- kW, kWh, and therm savings;
- Problems encountered and proposed solutions;
- Costs incurred during the reporting period disaggregated by type of cost, such as administrative costs, rebates, and monitoring;
- Findings from all research projects; and
- Other significant information.

A summary detailing DSM program expenses are provided in Tables 1 and 2. Program energy savings are provided in Tables 3 and 4. Societal Benefits are provided in Table 5. Lifetime Environmental Savings are provided in Table 6. Program savings and costs since program inceptions are provided in Table 7.

# **UNS Electric, Inc.**

## **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009**

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# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

**Table 1**

### DSM PROGRAM EXPENSES: JULY - DECEMBER 2009

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
<b>Residential Programs</b>							
Low-Income Weatherization	\$ 80,575	\$ 145	\$ -	\$ 2,041	\$ -	\$ 2,110	\$ 84,870
Energy Smart Homes	\$ 3,200	\$ 175	\$ -	\$ 84,904	\$ 7,711	\$ 3,069	\$ 99,060
Shade Tree Program	\$ 1,410	\$ 203	\$ 194	\$ 3,275	\$ 5,025	\$ 299	\$ 10,407
ENERGY STAR® Lighting (CFL)	\$ 85,274	\$ -	\$ 317	\$ 47,450	\$ -	\$ 3,275	\$ 136,316
Efficient Home Cooling	\$ 51,000	\$ 378	\$ -	\$ 11,389	\$ 3,093	\$ 1,637	\$ 67,497
<b>Total for Residential Programs</b>	<b>\$ 221,459</b>	<b>\$ 901</b>	<b>\$ 511</b>	<b>\$ 149,059</b>	<b>\$ 15,830</b>	<b>\$ 10,390</b>	<b>\$ 398,151</b>
<b>Support Programs</b>							
Education & Outreach Programs	\$ 3,000	\$ 53,456	\$ 20,113	\$ 1,654	\$ -	\$ 2,047	\$ 80,269
<b>Total for Support Programs</b>	<b>\$ 3,000</b>	<b>\$ 53,456</b>	<b>\$ 20,113</b>	<b>\$ 1,654</b>	<b>\$ -</b>	<b>\$ 2,047</b>	<b>\$ 80,269</b>
<b>Commercial Programs</b>							
Commercial Facilities Efficiency	\$ 297,013	\$ -	\$ -	\$ 45,779	\$ -	\$ 8,658	\$ 351,451
<b>Total for Commercial Programs</b>	<b>\$ 297,013</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45,779</b>	<b>\$ -</b>	<b>\$ 8,658</b>	<b>\$ 351,451</b>
<b>Segment Totals</b>	<b>\$ 521,472</b>	<b>\$ 54,357</b>	<b>\$ 20,624</b>	<b>\$ 196,492</b>	<b>\$ 15,830</b>	<b>\$ 21,095</b>	<b>\$ 829,871</b>

Program Costs	\$ 829,871
Measurement, Evaluation & Research (MER)	\$ 83,656
Baseline Study	\$ 6,653
<b>TOTAL</b>	<b>\$ 920,180</b>

**Table 2**

### DSM PROGRAM EXPENSES: JANUARY - DECEMBER 2009

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
<b>Residential Programs</b>							
Low-Income Weatherization	\$ 80,575	\$ 3,328	\$ -	\$ 3,997	\$ -	\$ 4,547	\$ 92,447
Energy Smart Homes	\$ 4,000	\$ 477	\$ 337	\$ 146,774	\$ 18,191	\$ 5,927	\$ 175,707
Shade Tree Program	\$ 3,600	\$ 412	\$ 194	\$ 8,864	\$ 14,203	\$ 1,476	\$ 28,749
ENERGY STAR® Lighting (CFL)	\$ 151,721	\$ 2,138	\$ 2,973	\$ 111,975	\$ 16,553	\$ 10,819	\$ 296,180
Efficient Home Cooling	\$ 92,600	\$ 448	\$ -	\$ 26,796	\$ 17,465	\$ 3,739	\$ 141,047
<b>Total for Residential Programs</b>	<b>\$ 332,496</b>	<b>\$ 6,803</b>	<b>\$ 3,504</b>	<b>\$ 298,407</b>	<b>\$ 66,412</b>	<b>\$ 26,508</b>	<b>\$ 734,130</b>
<b>Support Programs</b>							
Education & Outreach Programs	\$ 3,000	\$ 53,456	\$ 49,568	\$ 5,007	\$ -	\$ 3,391	\$ 114,423
<b>Total for Support Programs</b>	<b>\$ 3,000</b>	<b>\$ 53,456</b>	<b>\$ 49,568</b>	<b>\$ 5,007</b>	<b>\$ -</b>	<b>\$ 3,391</b>	<b>\$ 114,423</b>
<b>Commercial Programs</b>							
Commercial Facilities Efficiency	\$ 327,924	\$ 1,386	\$ 752	\$ 91,377	\$ -	\$ 10,508	\$ 431,947
<b>Total for Commercial Programs</b>	<b>\$ 327,924</b>	<b>\$ 1,386</b>	<b>\$ 752</b>	<b>\$ 91,377</b>	<b>\$ -</b>	<b>\$ 10,508</b>	<b>\$ 431,947</b>
<b>Segment Totals</b>	<b>\$ 663,420</b>	<b>\$ 61,645</b>	<b>\$ 53,824</b>	<b>\$ 394,791</b>	<b>\$ 66,412</b>	<b>\$ 40,408</b>	<b>\$ 1,280,500</b>

Program Costs	\$ 1,280,500
Measurement, Evaluation & Research (MER)	\$ 149,625
Baseline Study	\$ 6,653
<b>TOTAL</b>	<b>\$ 1,436,777</b>

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Definitions

**Rebates & Incentives** – Includes dollars that go toward customer rebates and incentives as well as payments made to agencies for installation of low-income weatherization measures.

**Training and Technical Assistance** – Includes all dollars that are used for energy-efficiency training and technical assistance.

**Consumer Education** – Includes dollars that are used to support general consumer education about energy-efficiency improvements.

**Program Implementation** – Program delivery costs associated with implementing the program – includes implementation contractor (“IC”) labor and overhead costs, as well as other direct program delivery costs.

**Program Marketing** – Includes all expenses related to marketing the program and increasing DSM consumer awareness (direct program marketing costs as opposed to general consumer education).

**Planning and Administration** – Costs to plan, develop, and administer programs – includes management of program budgets, oversight of the RFP process and IC program development, program coordination, and general overhead expenses.

**Measurement, Evaluation, and Research (“MER”)** – These activities will identify current baseline efficiency levels and the market potential of DSM measures, perform process evaluations, verify that energy-efficient measures are installed, track savings, and identify additional energy-efficiency research. Costs include the development of a database to track participation and savings.

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

**Table 3**

### DSM ENERGY SAVINGS: JULY – DECEMBER 2009

Program	Capacity Savings MW	Annual MWh Savings	Annual Therm Savings	Lifetime MWh Savings	Lifetime Therm Savings
Low-Income Weatherization	0.00	33	703	652	14,052
Energy Smart Homes	0.04	23	368	411	6,624
Shade Tree	0.00	23	0	453	0
ENERGY STAR® Lighting (CFL)	0.79	4,663	0	44,462	0
Efficient Home Cooling	0.07	225	0	3,368	0
Commercial Facilities Efficiency	0.73	2,942	0	33,664	0
<b>Portfolio Totals</b>	<b>1.64</b>	<b>7,907</b>	<b>1,071</b>	<b>83,009</b>	<b>20,676</b>

**Table 4**

### DSM ENERGY SAVINGS: JANUARY – DECEMBER 2009

Program	Capacity Savings MW	Annual MWh Savings	Annual Therm Savings	Lifetime MWh Savings	Lifetime Therm Savings
Low-Income Weatherization	0.00	33	703	652	14,052
Energy Smart Homes	0.10	48	848	862	15,264
Shade Tree	0.00	58	0	1,157	0
ENERGY STAR® Lighting (CFL)	1.33	7,852	0	75,583	0
Efficient Home Cooling	0.14	414	0	6,216	0
Commercial Facilities Efficiency	0.80	3,172	0	37,817	0
<b>Portfolio Totals</b>	<b>2.37</b>	<b>11,577</b>	<b>1,551</b>	<b>122,287</b>	<b>29,316</b>

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

**Table 5**

### DSM SOCIETAL BENEFITS: JANUARY – DECEMBER 2009

DSM Program	Program Cost	Societal Benefits	Societal Costs	Net Benefits
<b>Residential</b>				
Low-Income Weatherization <sup>1</sup>	\$ 92,447	\$ 92,447	\$ 92,447	\$ -
Energy Smart Homes	\$ 175,707	\$ 162,801	\$ 197,328	\$ (34,527)
Shade Tree Program	\$ 28,749	\$ 55,187	\$ 28,989	\$ 26,198
ENERGY STAR® Lighting (CFL)	\$ 296,180	\$ 2,557,091	\$ 606,548	\$ 1,950,543
Efficient Home Cooling	\$ 141,047	\$ 397,821	\$ 220,788	\$ 177,033
<b>Total for Residential</b>	<b>\$ 734,130</b>	<b>\$ 3,265,348</b>	<b>\$ 1,146,101</b>	<b>\$ 2,119,247</b>
<b>Non-Residential</b>				
Commercial Facilities Efficiency	\$ 431,947	\$ 2,105,064	\$ 775,993	\$ 1,329,071
<b>Total for Non-Residential</b>	<b>\$ 431,947</b>	<b>\$ 2,105,064</b>	<b>\$ 775,993</b>	<b>\$ 1,329,071</b>
<b>Segment Totals</b>	<b>\$ 1,166,077</b>	<b>\$ 5,370,412</b>	<b>\$ 1,922,094</b>	<b>\$ 3,448,318</b>
Measurement, Evaluation & Research (MER)	\$ 149,625	\$ -	\$ 149,625	\$ (149,625)
Baseline Study	\$ 6,653	\$ -	\$ 6,653	\$ (6,653)
<b>TOTAL</b>	<b>\$ 1,322,354</b>	<b>\$ 5,370,412</b>	<b>\$ 2,078,372</b>	<b>\$ 3,292,040</b>

1. Consistent with Commission Staff's analysis in Decision No. 70347, the societal benefits for low-income weatherization are equal to or greater than the societal costs when taking the environmental benefits into account.

**Table 6**

### DSM LIFETIME ENVIRONMENTAL SAVINGS: JANUARY – DECEMBER 2009

Program	Lifetime SO <sub>x</sub> Reduction (lbs)	Lifetime NO <sub>x</sub> Reduction (lbs)	Lifetime CO <sub>2</sub> Reduction (lbs)	Lifetime Water Reduction (gallons)
Low-Income Weatherization	515	1,642	947,732	151,823
Energy Smart Homes	681	2,172	1,214,347	200,813
Shade Tree	914	2,915	1,388,160	269,534
ENERGY STAR® Lighting (CFL)	59,711	190,470	90,699,962	17,610,909
Efficient Home Cooling	4,911	15,665	7,459,640	1,448,414
Commercial Facilities Efficiency	29,875	95,298	45,379,970	8,811,278
<b>Program Totals</b>	<b>96,606</b>	<b>308,162</b>	<b>147,089,811</b>	<b>28,492,771</b>



# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

Table 7

### DSM SAVINGS & EXPENSES SINCE PROGRAM INCEPTION: JANUARY 1994 – DECEMBER 2009<sup>1</sup>

PROGRAM	Start Date	Program Participants/Units		Program Expenses		MW Savings		MWh Savings		Therm Savings	
		Jan - Dec	Program Inception to Date	Jan - Dec	Program Inception to Date	Jan - Dec	Total Annual <sup>a</sup>	Jan - Dec	Total Annual <sup>a</sup>	Jan - Dec	Total Annual <sup>a</sup>
Residential											
Good Cents Homes	1994	0	452	\$ -	\$ 617,706	0.00	0.96	0	830	N/A	N/A
Energy Smart Homes	2007	28	36	\$ 175,707	\$ 345,618	0.10	0.11	48	64	848	1,751
Shade Tree	2008	240	240	\$ 28,749	\$ 31,539	0.00	0.00	58	58	N/A	N/A
Energy Star Lighting (CFL)	2008	171,108	171,108	\$ 296,180	\$ 312,910	1.33	1.33	7,852	7,852	N/A	N/A
Efficient Home Cooling	2008	419	448	\$ 141,047	\$ 158,019	0.14	0.15	414	447	N/A	N/A
Commercial											
Commercial Facilities Efficiency	2008	53	53	\$ 431,947	\$ 435,321	0.80	0.80	3,172	3,172	N/A	N/A
Support Programs											
Education & Outreach <sup>*</sup>	1994	2,679	14,227	\$ 114,423	\$ 3,184,075	0.00	5.14	0	15,809	N/A	N/A
Low-Income Weatherization	1994	72	393	\$ 92,447	\$ 319,488	0.00	0.13	33	299	703	5623
<sup>*</sup> Includes numbers previously reported separately under Residential and Commercial Energy Survey and Commercial New Construction.											
Measurement, Evaluation & Research (MER) - all programs	NA	NA	NA	\$ 149,625	\$ 265,292	NA	NA	NA	NA	NA	NA
Baseline Study	2009	NA	NA	\$ 6,653	\$ 6,653	NA	NA	NA	NA	NA	NA
TOTAL		174,599	186,957	\$1,436,777	\$ 5,676,621	2.37	8.63	11,577	28,531	1,551	7,374
											17,691

a. Accumulated savings for one year for all energy efficiency measures installed since program inception.

b. Accumulated savings for all years for all energy efficiency measures installed since program inception.

<sup>1</sup> Historical DSM Program savings will decrease as the measure lifetimes expire. Programs with fully expired lifetimes will no longer be reported. Historical programs include Good Cents and historical measures previously reported under Residential and Commercial Surveys and Commercial New Construction and currently reported under Education & Outreach.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### UNS ELECTRIC LOW-INCOME WEATHERIZATION PROGRAM

##### Description

The UNS Electric Low-Income Weatherization ("LIW") Program is designed to improve the energy efficiency of homes for customers whose income falls within the defined federal poverty guidelines. By the steps taken in this program, UNS Electric will be reducing gas and electric bills for these eligible customers. Savings from these measures will help the customers utilize their limited income for other necessary items such as rent, food, or medical expenses.

##### Program Modifications

There were no program modifications this reporting period.

##### Program Goals, Objectives, and Savings Targets

- Increase the number of homes weatherized each year;
- Lower the average household utility bills of low income customers by utilizing energy conservation measures in the weatherization process; and
- Improve the quality of life for customers by providing them with a safer and healthier home.

##### Levels of Participation

A total of 72 households received weatherization assistance during this reporting period. UNS Electric weatherized 28 more homes in calendar year 2009 than in 2008.

##### Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. At this time, the Arizona Energy Office ("AEO") does not have sufficient historical energy usage on UNS Electric customers participating in the program. The AEO requires a minimum of two years of billing data with a preference of four years of data for each customer. The AEO is currently receiving billing data from UNS Electric for the homes weatherized and is working on evaluation for future reports.

##### kW, kWh, and Therm Savings<sup>2</sup>

No. of Homes	kW savings	kWh savings	Therm savings
72	0.0	32,580	703

##### Problems Encountered and Proposed Solutions

The client poverty level guideline difference between UNS Electric and other funding sources has caused some additional accounting work for the agencies in 2009. Most funding sources have increased their qualification for a client to receive weatherization services to a maximum household income of 200% of federal poverty level while UNS Electric remains at 150%.

<sup>2</sup> Savings are estimated for UNS Electric customers by using the Savings-to-Investment Ratio provided in the January 2010 AEO report. Once sufficient local records are available, the AEO will provide analysis on actual energy savings for UNS Electric customers. The AEO estimates little to no kW savings for UNS Electric Low-Income Weatherization participants.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

The agencies have on occasion improperly requested funds from UNS Electric for weatherized homes that exceed the maximum household income and have been required to re-invoice UNS Electric and reallocate funding for those clients who exceed the UNS Electric guideline to other funding sources. To help streamline this process UNS Electric is considering seeking Arizona Corporation Commission ("ACC" or "Commission") approval to raise the eligibility standard to 200% of federal poverty level. This will not only reduce time spent by both UNS Electric and the agencies correcting improper invoices, but will also increase the number of homes receiving weatherization assistance.

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives*	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Low-Income Weatherization	\$ 80,575	\$ 145	\$ -	\$ 2,041	\$ -	\$ 2,110	\$ 84,870

*\*Includes \$12,365 for health and safety related repairs*

#### Findings from All Research Projects

No research projects were performed during this reporting period.

#### Other Significant Information

UNS Electric has increased funding by 3% for all agencies in 2009. The agencies have made significant progress ramping up their workforce and the increase in the number of weatherized homes reflects their success. The two major agencies, Western Arizona Council of Governments ("WACOG") and Southeast Arizona Community Action Program ("SEACAP") have leveraged their funding from UNS Electric along with other funding sources to increase the number of customers receiving weatherization assistance.

As reported mid-year, WACOG, with full approval from UNS Electric and the AEO, weatherized homes at two multi-family projects. Multi-family projects allow the agencies to maximize their funding since travel time and labor costs are reduced along with a decrease in material costs due to bulk bidding. UNS Electric supports the efforts of the agencies to increase the number of multi-family projects.

# **UNS Electric, Inc.**

## **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009**

### **UNS ELECTRIC ENERGY SMART HOMES PROGRAM**

#### **Description**

The Residential New Construction Program for UNS Electric is marketed under the name of Energy Smart Homes ("ESH"). The ESH Program emphasizes the whole-house approach to improving health, safety, comfort, durability, and energy efficiency. The Program promotes homes that meet the Environmental Protection Agency ("EPA")/Department Of Energy ("DOE") ENERGY STAR® Home performance requirements. To encourage participation, the program provides incentives to homebuilders for each qualifying home. Required on-site inspections and field testing of a random sample of homes to meet ENERGY STAR® Home performance requirements will be conducted by third-party Residential Energy Services Network certified energy raters selected by each builder. Components of ESH include development of branding, builder training curriculum, and marketing material.

#### **Program Modifications**

No modifications for this reporting period.

#### **Program Goals, Objectives, and Savings Targets**

- Work with local builders to construct energy-efficient homes;
- Train builder construction staff and subcontractors in advanced building science concepts to increase energy efficiency through improved design and installation practices;
- Transform the market and improve construction practices in the UNS Electric service territory;
- Reduce peak demand and overall energy consumption in new homes;
- Assist builder sales agents with promoting and selling energy-efficient homes;
- Increase homebuyer awareness and understanding of energy-efficient building practices and the benefits of purchasing an energy-efficient home; and
- Achieve an annual participation of between 9% and 11% of new home units.

#### **Levels of Participation**

There are 13 builders participating in the UNS Electric territory: CastleRock; Clifton Construction; Conley Construction; Dorn Homes; Dorn Homes at Rio Rico; GV Lawson; Innovative Homes; Magic Homes; Stonegate; and Richard Zeron. These builders represent 583 potential Energy Smart Homes. Innovative Homes, which had previously been removed from the program, has renewed their efforts for a participating development in Rio Rico.

The program completed 16 homes during this reporting period, and 28 homes have been completed in calendar year 2009.

#### **Evaluation and Monitoring Activities and Results**

No evaluation or monitoring is available for this reporting period. Summit Blue Consulting ("Summit Blue") has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected in 2010.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### kW, kWh, and Therm Savings

No. of Homes	kW savings	kWh savings	Therm savings
16	44	22,812	368

#### Problems Encountered and Proposed Solutions

The real estate market is continuing to present challenges to participating and potential builders. New construction market activity in the program territory continues to be slow, similar to national levels. The slump in new housing sales seems especially acute in smaller towns in Arizona where employment is a primary driver of real estate purchases. The foreclosure market of existing, nearly new homes competes on price against new construction. Program staff is continuing to use this downturn in the market to give builders, contractors, and developers a way to distinguish themselves in the marketplace, with a higher quality, lower operational cost product.

Additionally, program staff continues to focus on reaching out to homebuyers and the public so their requests for more energy efficient homes will drive decision making by builders.

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives*	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Energy Smart Homes	\$ 3,200	\$ 175	\$ -	\$ 84,904	\$ 7,711	\$ 3,069	\$ 99,060

*\*Homes completed in Santa Cruz County have the option of either receiving an incentive or having UNS Electric perform the necessary inspections and testing needed for ENERGY STAR® certification.*

#### Findings from All Research Projects

No research projects have been undertaken during this time period.

#### Other Significant Information

Program staff continues to look forward to ACC approval of the three tier incentive system as proposed for the electric territory. The program modification will provide stronger messaging and incentives to bring to local builders in the market.

A list of new or revised marketing materials is shown in Appendix 2. Please see the attached CD for copies of the new marketing materials.

# **UNS Electric, Inc.**

## **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009**

### **UNS ELECTRIC EDUCATION AND OUTREACH PROGRAMS**

#### **COMMERCIAL AND RESIDENTIAL EDUCATION PROGRAMS**

##### **Description**

The UNS Electric commercial and residential education programs are designed to educate customers on energy use and assist them with energy savings suggestions. The primary tool to assist customers is the online Energy Advisor which provides the customer with more than 140 energy savings recommendations or measures and can be personalized for weather and utility rates based on the customer's zip code. UNS Electric promotes the Energy Advisor online audit through a variety of advertising promotions such as bill inserts, web advertising, and radio advertising.

During this reporting period, UNS Electric participated in the Mohave County Fair. This was a four-day event attracting several thousand residents and business owners in the Company's service territories and surrounding areas. UNS Electric provided conservation and energy-efficiency information to attendees, as well as promoting the benefits of compact fluorescent lighting and energy-efficient new construction practices. Handouts included the DOE's *Energy Savers Book*, UNS Electric Energy Advisor brochures, and UNS Electric Efficient Home Cooling Brochures.

In addition, UNS Electric representatives spoke at many civic and other organizational meetings promoting DSM Programs and energy education. These organizations and civic bodies include:

- Mohave County Board of Supervisors;
- Mohave County Coalition Youth Team – "Green Team";
- Arizona Governor's Economic Development Conference;
- Lower Colorado River Resource Conservation & Development;
- Kingman Kiwanis; and
- Kingman Rotary

During this reporting period UNS Electric continued internal education of its employees. Several informational employee meetings were held to provide education and information to the employees regarding the DSM programs. Emphasis was placed on the purpose of offering programs, how they are funded and their importance in the success of the programs. The meetings were well received and many questions were answered during these sessions.

##### **Program Modifications**

No modifications for this reporting period.

##### **Program Goals, Objectives, and Savings Targets**

The program is designed to educate commercial and residential customers on ways to save energy through conservation measures, energy-efficiency measures or utilizing Time-of-Use ("TOU") rates.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Levels of Participation

##### Energy Advisor

For this reporting period 1,023 residential customers and 315 commercial customers accessed the online Energy Advisor, with 367 residential customers and 13 commercial customers completing an online energy audit.

UNS Electric continued to advertise the Energy Advisor throughout most of the summer months along with other programs within our Bright Solutions Family Campaign. We anticipated a drop in participants accessing the Energy Advisor when our advertising was reduced towards the end of the year and with cooler seasonal temperatures. That was proven by the decrease in residential customer participation. However, commercial customers accessing the Energy Advisor increased 84% during the second half of 2009 over the first half of 2009. This implies that commercial customers continue to become more aware of the availability of the commercial Energy Advisor and are also using the tool to receive energy savings information for their businesses.

##### PowerShift ("TOU")

For this reporting period, 193 customers were enrolled in the PowerShift TOU Program.

#### Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

#### ACADEMIC EDUCATION PROGRAM

##### **Description**

UNS Electric offers several school education programs that cover a variety of topics related to energy, natural resource conservation, and environmental awareness. These programs are currently targeted to students in grades K-8. In addition to making available age-appropriate class sets of booklets (with teachers' guides) about electricity, energy efficiency, and conservation to schools, UNS Electric's Academic Education Program provides on-site classroom presentations.

#### Levels of Participation

Participation for this reporting period is listed below:

<i>Program</i>	<i>Number of Teachers</i>	<i>Number of Students</i>
Classroom Presentations	0	0
Energy Conservation/Environmental classroom materials	210	15,106
<b>TOTAL</b>	<b>210</b>	<b>15,106</b>

The Education section of the UNS Electric website received 4,903 visits and 7,739 pages viewed during this reporting period.

#### Program Modifications

No modifications were made during this reporting period.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Program Goals and Objectives

These programs are all designed to educate students and their families on ways to save energy and to provide hands-on experiences, putting to test the options for saving energy.

#### ALL EDUCATION & OUTREACH PROGRAMS

##### Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period.

#### kW, kWh, and Therm Savings

There are no kW, kWh or therm savings associated with these programs.

#### Costs Incurred

Costs incurred for all Education and Outreach Programs during this reporting period are listed below:

DSM Program	Academic Education	Consumer Education	Time of Use Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Education & Outreach	\$ 3,000	\$ 53,456	\$ 20,113	\$ 1,654	\$ -	\$ 2,047	\$ 80,269

#### Findings from All Research Projects

No research projects were performed during this reporting period.

#### Other Significant Information

On October 19, 2009, 26 UNS Electric commercial customers received an email requesting they complete a survey regarding their experience with the Energy Advisor tool. Customers had until November 2, 2009 to complete the survey and receive a Starbucks gift card. UNS Electric did not receive any completed surveys.

In October a bill insert was mailed to all customers announcing the new Phantom Load and KiloWatt Counter calculator tools that are available online. UNS Electric included a marketing tile on the home page of the UNS Electric website directing customers to these new tools and an e-banner for our e-billing customers. Also in October, UNS Electric launched a marketing campaign for the PowerShift™ TOU electric rate which included print ads, a bill insert and web content. Finally, UNS Electric launched a Holiday Lighting Calculator and the Carbon Footprint Calculator on the website. The Holiday Lighting Calculator compares standard holiday lighting options to LED options. The Carbon Footprint Calculator is a basic calculator that allows a customer to analyze the size of their carbon footprint by answering some questions on their home energy and water usage, transportation styles, recycling habits, etc.

A list of new or revised marketing materials is shown in Appendix 2. Please see the attached CD for copies of the marketing materials for this program.



## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### UNS ELECTRIC EFFICIENT HOME COOLING PROGRAM

##### Description

The UNS Electric Residential HVAC Retrofit Program is marketed under the name of "Efficient Home Cooling Program" ("EHC"). This program promotes the installation of high-efficiency air conditioning and heat pump systems in existing homes in the UNS Electric service territory.

##### Program Modifications

No modifications for this reporting period.

##### Program Goals, Objectives and Savings Targets

- Promote the installation of high-efficiency air conditioners and heat pumps;
- Reduce customer energy bills, provide equal or better comfort conditions, conserve energy and benefit the environment; and
- Achieve target participation of 700+ air conditioners and heat pumps installed per year.

##### Levels of Participation

For this reporting period, UNS Electric has paid rebates on 231 HVAC units as follows:

Quantity	Equipment Type	SEER	Incremental Cost
22	Air Conditioner	14	\$260.22
119	Heat Pump	14	\$320.84
8	Air Conditioner	15	\$614.58
38	Heat Pump	15	\$647.47
4	Air Conditioner	16	\$656.68
29	Heat Pump	16	\$944.79
2	Air Conditioner	17	\$1,077.62
4	Heat Pump	17	\$1,345.06
2	Air Conditioner	18	\$1,347.03
3	Heat Pump	18	\$1,469.04
231			

##### Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected in 2010.

##### kW, kWh, and Therm Savings

No. of Units Installed	kW savings	kWh savings	Therm savings
231	75	224,525	0

##### Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing*	Planning & Admin	Program Total Cost
Efficient Home Cooling	\$ 51,000	\$ 378	\$ -	\$ 11,389	\$ 3,093	\$ 1,637	\$ 67,497

*\*Includes \$0.00 in contractor rebates*

#### Findings from All Research Projects

No research projects have been undertaken during this time period.

#### Other Significant Information

HVAC Contractors continue to be actively recruited for participation in the Program. To date 45 contractors throughout the UNS Electric service territory have signed agreements to participate in the program. There was no new marketing material produced during this reporting period.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### UNS ELECTRIC ENERGY STAR® LIGHTING PROGRAM

##### Description

The UNS Electric Compact Fluorescent Lamp ("CFL") Buy-down Program is marketed under the name of "ENERGY STAR® Lighting Program". This program promotes the installation of energy-efficient ENERGY STAR® approved lighting products by residential and commercial customers in the UNS Electric service territory.

##### Program Modifications

Program participation has been greater than expected. On June 30, 2009, UNS Electric received Commission approval to increase the program funding with Decision No. 71179.

##### Program Goals, Objectives, and Savings Targets

The program objectives are to:

- Reduce peak demand and overall energy consumption in homes and small businesses;
- Increase the purchase of CFLs;
- Increase the availability of energy-efficient lighting products in the marketplace; and
- Increase the awareness and knowledge of retailers and UNS Electric customers on the benefits of energy-efficient lighting products.

The old 2009 sales, demand, and energy savings projection:

Year	2009	2010	2011	2012
Projected Lamp sales	82,802	85,286	87,845	90,480
Peak Demand Savings (kWh)	311	320	330	340
Energy Savings (kWh)	2,655,582	2,735,249	2,817,307	2,901,826

The new 2009 sales, demand, and energy savings projection:

Year	2009	2010	2011	2012
Projected Lamp sales	200,255	206,263	212,451	218,824
Peak Demand Savings (kWh)	1,022	1,053	1,084	1,117
Energy Savings (kWh)	11,261,022	11,598,853	11,946,819	12,305,223

##### Levels of Participation

A total of 100,553 CFLs were sold during this reporting period. Total sales for 2009 were 171,108. CFL sales by retailer and number sold by wattage are listed in Appendix 1.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Evaluation and Monitoring Activities and Results

In May, Summit Blue began surveying customers at UNS Electric outreach events. Customers purchasing CFLs were asked to fill out a contact card. Summit Blue would then follow up with a phone call. Results are not available as of the date of this report. Final MER results are expected in 2010.

#### kW, kWh, and Therm Savings

No. of CFLs Sold	kW savings	kWh savings	Therm savings
100,553	789	4,662,624	0

#### Problems Encountered and Proposed Solutions

The large size of the territory has posed some challenges in managing the program. Travel expenses are greater than expected due to distance between stores. The frequency of store visits is reduced by the travel distances involved. It is difficult to provide a solution without adding costs to the program.

There is demand for better quality three way CFL bulbs and a dimmable CFL bulb. UNS Electric is also getting repeated requests for information on LED bulbs. It will take time for the manufacturers to respond and produce a quality ENERGY STAR® rated LED product.

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
ENERGY STAR® Lighting (CFL)	\$ 85,274	\$ -	\$ 317	\$ 47,450	\$ -	\$ 3,275	\$ 136,316

#### Findings from All Research Projects

No research projects have been undertaken during this time period.

#### Other Significant Information

Nearly 30,000 more bulbs were sold in this 6 month reporting period than in the previous 6 month period. Sales in Nogales increased from 32% of the overall sales to 49.9% for this reporting period, finishing at 40% for calendar year 2009. It appears that CFL bulbs are still gaining consumer acceptance overall.

UNS Electric has found that retailer visits are playing a critical role toward the success of the program. Visits focus on proper program information and signage; ensuring product is displayed prominently; checking product inventory; and training staff on the benefits of program participation. UNS Electric performed 202 store visits during this reporting period. In addition, UNS Electric held 23 aisle training events for retail employees.

UNS Electric performed 11 weekend outreach events at various retailers during this reporting period. Outreach events consist of one or more UNS Electric representatives promoting various CFL products and educating the customer in the retail outlet. Outreach events typically last about four hours. Retailers are very appreciative of this type of outreach to their customers and always encourage repeat events at their locations. Unfortunately, retail store traffic has been considered slow by the retail store management during this reporting period.

## **UNS Electric, Inc.**

### **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD:**

**July through December 2009**

Marketing efforts for this reporting period include:

- Program signage was produced and placed in public viewing areas throughout UNS Electric facilities.
- Promotional signs were installed in the UNS Electric lobby where customers come in to pay their bills. The signs direct customers to the retail stores where CFL bulbs can be purchased.
- UNS Electric created a bulb display showing an incandescent vs. a CFL bulb. Customers can see the difference in energy used, brightness and colorization. A dimmable bulb was added to the display to help answer consumer questions. This display is used at in-store outreach events, schools, and other events where UNS Electric is exhibiting.
- UNS Electric developed two new marketing pieces. The first was a CFL bulb application guide. This guide was exhibited at retail stores to help customers select the correct CFL bulb for the correct application. The guide was modeled after the ENERGY STAR® guide. The second piece was a bill insert that was sent to over 82,000 UNS Electric customers in their June/July billing cycle.
- In December, a buy one - get one free promotion was held at the Kingman Home Depot store. The event was supported with event specific print ads and radio ads in English and Spanish. A live remote was held on the day of the event.
- Twelve calls were made to the 800 number during this reporting period. This is less than one call every other week. Callers most often asked where they could purchase CFL bulbs.
- There were over 34 visits to the website for this program. The website includes a calendar of events and a retailer locator page.

A list of new or revised marketing materials is shown in Appendix 2. Please see the attached CD for copies of the marketing materials for this program.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### UNS ELECTRIC SHADE TREE PROGRAM

##### Description

The UNS Electric Shade Tree Program is marketed under the name of "Trees for You" and is primarily targeted to residential customers, including low-income families, but community organizations, commercial customers, and schools can also participate if they meet the program requirements. UNS Electric customers are allowed to purchase two desert adapted, 5-gallon trees per year (four for homes built before 1980) which must be planted on the south, west, or east side of the home. Customers purchase the tree(s) from the nursery of their choice, complete an application provided by UNS Electric, provide a copy of their paid invoice and submit all information to UNS Electric to receive a \$15.00 (per tree) credit on their electric bill.

##### Program Modifications

No modifications for this reporting period.

##### Program Goals, Objectives, and Savings Targets

The goal of the program is to promote energy conservation and the environmental benefits associated with planting low water usage trees. Along with the energy savings trees provide to the homes, trees also provide habitat for wildlife, absorb air and water pollutants, and control storm water runoff and soil erosion along with the aesthetic beauty they provide to neighborhoods and the community.

##### Levels of Participation

For this reporting cycle, UNS Electric received 46 customer applications for a total of 98 trees. From those 44 applications met eligibility requirements and rebate credits were issued for 94 trees.

##### Evaluation and Monitoring Activities and Results

Due to the smaller number of trees purchased during this reporting period, UNS Electric did not perform any onsite inspections. UNS Electric will perform additional inspections in 2010 which will include a random sampling of the trees reported above.

##### kW, kWh, and Therm Savings

No. of Trees	kW savings	kWh savings	Therm savings
94	0	22,654	0

##### Problems Encountered and Proposed Solutions

There are a limited number of merchants in the Nogales service territory that supply trees. Only K-Mart, Wal-Mart and Home Depot have nurseries and research has shown no independent nurseries in Nogales or surrounding areas. Periodic visits to these stores have verified that Wal-Mart and Home Depot carry an inventory of eligible trees. K-Mart's nursery section is quite small, stocking primarily small plants and a very limited tree selection.

UNS Electric has actively promoted this program through bill inserts and the website as well as providing information at local events and home shows. Additionally, during this reporting cycle UNS Electric promoted the Trees for You program through ads in three local newspapers.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Shade Tree	\$ 1,410	\$ 203	\$ 194	\$ 3,275	\$ 5,025	\$ 299	\$ 10,407

#### Findings from All Research Projects

No research projects were conducted during this reporting period.

#### Other Significant Information

UNS Electric announced the Trees for You program in January 2009. Program information was posted on the website. The website contains all information on the Trees for You program, including an application form, general information on the eligible trees, Blue Stake and planting information, and information regarding tree maintenance and fire protection.

UNS Electric will begin an active promotional campaign in the first half of 2010 to coincide with the spring planting season. This will include but not be limited to bill inserts, promotions at retail, community and/or educational events and newspaper ads. UNS Electric will continue to promote the program on its website.

A list of new or revised marketing materials is shown in Appendix 2. Please see the attached CD for copies of the marketing materials for this program.

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### UNS ELECTRIC COMMERCIAL FACILITIES EFFICIENCY PROGRAM

##### Description

The UNS Electric Commercial Facilities Efficiency Program is designed to minimize some of the barriers to implementation of energy-efficiency improvements in the commercial market, such as lack of capital, information search costs, transaction costs, performance uncertainty, and the so-called "hassle factor". Commercial firms generally concentrate on their core business, and do not have the wherewithal to analyze energy use and improve efficiency unaided.

The program provides incentives directly to contractors for the installation of selected high efficiency lighting; heating, ventilation and air conditioning ("HVAC"); motors and refrigeration measures. The incentives are set at a higher level for this market in order to encourage contractors to market and deliver the program thus offsetting the need for UNS Electric marketing and overhead expenses. The program also employs an internet-based measure analysis and customer proposal processing system which makes the process easier for both contractors and customers. The program also provides customers with the opportunity to propose innovative energy-efficiency solutions through custom energy-efficient measures.

##### Program Modifications

No modifications for this reporting period.

##### Program Goals, Objectives, and Savings Targets

The primary objective of the Program is to encourage UNS Electric's small business customers to install energy-efficiency measures in existing facilities. More specifically, the program is designed to:

- Encourage commercial customers to install high-efficiency lighting equipment and controls, HVAC equipment, and energy-efficient refrigeration system retrofits in their facilities;
- Encourage contractors to promote the program and provide turn-key installation services to small business customers;
- Overcome the unique market barriers of the small business market including:
  - First costs and lack of access to capital for energy-efficiency improvements;
  - Lack of awareness and knowledge about the benefits and cost of energy-efficiency improvements;
  - Hassle and transactions costs; and
  - Performance uncertainty associated with energy-efficiency projects;
- Assure that the participation process is clear, easy to understand and simple; and
- Increase the awareness and knowledge of business owners, building owners and managers, and other decision-makers on the benefits of high-efficiency equipment and systems.

##### Savings targets are as follows:

Year	2009	2010	2011	2012
Energy Savings (kWh)	2,351,000	2,422,000	2,494,000	2,534,000



# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Levels of Participation

Eighteen new applications were received during this reporting period. Forty-eight projects were completed. There have been no cancellations thus far of approved applications.

### Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected in 2010.

### kW, kWh, and Therm Savings

Measure	No. Installed	kW savings	kWh savings	Incremental Cost
Lighting	10,573	734	2,942,275	\$62.34

### Average Job Cost and Actual Customer Cost

Job #	Total Cost	Customer Cost	Job #	Total Cost	Customer Cost
1	\$ 10,819.90	\$ 6,115.33	25	\$ 2,962.50	\$ 1,490.41
2	\$ 11,019.60	\$ 6,239.92	26	\$ 13,951.00	\$ 4,439.74
3	\$ 2,023.00	\$ 917.35	27	\$ 16,484.80	\$ 6,484.80
4	\$ 3,274.00	\$ 620.07	28	\$ 13,348.00	\$ 3,348.00
5	\$ 4,913.80	\$ 2,346.04	29	\$ 10,771.60	\$ 4,214.36
6	\$ 21,030.00	\$ 13,904.70	30	\$ 15,716.00	\$ 5,716.00
7	\$ 1,940.40	\$ 1,222.21	31	\$ 7,421.00	\$ 4,847.09
8	\$ 7,598.40	\$ 4,039.61	32	\$ 2,459.40	\$ 1,115.21
9	\$ 4,578.90	\$ 2,841.45	33	\$ 3,790.20	\$ 633.90
10	\$ 12,867.70	\$ 5,104.31	34	\$ 12,492.00	\$ 2,492.00
11	\$ 13,865.00	\$ 3,865.00	35	\$ 14,976.00	\$ 5,063.14
12	\$ 12,240.00	\$ 2,240.00	36	\$ 24,111.00	\$ 14,111.00
13	\$ 2,434.80	\$ 1,064.31	37	\$ 10,479.40	\$ 1,287.46
14	\$ 715.60	\$ 297.91	38	\$ 1,965.60	\$ 604.06
15	\$ 1,891.50	\$ 1,086.70	39	\$ 77,250.00	\$ 28,307.87
16	\$ 1,925.40	\$ 244.73	40	\$ 144,182.40	\$ 134,182.40
17	\$ 5,159.60	\$ 773.94	41	\$ 4,207.80	\$ 1,326.01
18	\$ 6,565.40	\$ 1,400.46	42	\$ 1,151.00	\$ 246.59
19	\$ 1,267.60	\$ 341.90	43	\$ -	\$ (175.00)
20	\$ 3,113.40	\$ 511.32	44	\$ 5,395.50	\$ 2,551.56
21	\$ 2,344.80	\$ 455.48	45	\$ 1,962.40	\$ 1,289.49
22	\$ 3,756.10	\$ 888.63	46	\$ 4,575.40	\$ 3,023.94
23	\$ 2,526.70	\$ 1,148.44	47	\$ 19,308.40	\$ 15,821.57
24	\$ 7,222.40	\$ 6,951.12	48	\$ 137,750.00	\$ 87,750.00
<b>Average:</b>				<b>\$ 14,412.61</b>	<b>\$ 8,224.84</b>

## UNS Electric, Inc.

### SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

#### Problems Encountered and Proposed Solutions

UNS Electric is continuing to market the program to contractors to encourage their participation with the goal of increasing customer participation rate. In order to facilitate additional participation, UNS Electric has dedicated an employee to the promotion of this program and all other UNS Electric DSM programs within the UNS Electric service area.

#### Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Commercial Facilities Efficiency	\$ 297,013	\$ -	\$ -	\$ 45,779	\$ -	\$ 8,658	\$ 351,451

#### Findings from All Research Projects

No research projects have been undertaken during this time period.

#### Other Significant Information

The Commercial Facilities Efficiency Program was implemented January 2009. Information and application forms were developed and posted to the website. Six Trade Allies were added to the certified contractor list during this reporting period. They represent all areas of the service territory. Their company information is posted on the UNS Electric website. Using certified contractors to help promote the program has proven to be very successful.

Highlights of marketing efforts during this reporting period include:

- A field inspector was hired in Kingman. This will reduce inspection costs by reducing travel expenses.
- As part of ongoing internal program awareness, information on this and other UNS Electric DSM programs was presented at UNS Electric employee meetings in September.
- The program was promoted at eight outreach events throughout the community. UNS Electric representatives were available to discuss program details and literature was available as a take away.
- UNS Electric and a contractor were highlighted in the Kingman newspaper "The Dailey Miner" for a lighting project that was completed under the program.
- Other marketing and promotion of the program has been performed exclusively by the Trade Allies.

There was no new marketing material produced during this reporting period.

See pages 23-28 for an energy analysis of all completed projects.

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Energy Analysis for all Completed Projects - 1 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
75	Inline Electrical Resources	100W Inc lamp	6	18W CF-HW	492	45	1151.28
75	Inline Electrical Resources	75W Inc lamp	218	18W CF-HW	12426	45	29076.84
75	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	45	121.68
75	Inline Electrical Resources	2-4' 34/40W hybrid	5	2-4' 32W T8-EB1	130	168	1135.68
76	Inline Electrical Resources	75W Inc lamp	228	18W CF-HW	12996	45	30410.64
76	Inline Electrical Resources	4-4' 34/40W hybrid	1	2-4' 32W T8 EB1	110	45	257.4
76	Inline Electrical Resources	2-4' 34/40W hybrid	1	2-4' 32W T8-EB1	26	45	60.84
76	Inline Electrical Resources	2-4' 34/40W hybrid	5	2-4' 32W T8-EB1	130	168	1135.68
77	Inline Electrical Resources	75W Inc lamp	70	25W CF-HW	3150	45	7371
79	Inline Electrical Resources	1-2' 20W-T12-SB1	1	1-4' 32W-T8-EB1	-5	45	-11.7
79	Inline Electrical Resources	1-4' 34/40W hybrid	2	1-4' 32W-T8-EB1	38	168	331.968
79	Inline Electrical Resources	75W Inc lamp	60	15W CF-HW	3600	45	8424
79	Inline Electrical Resources	4-4' 34/40W hybrid	5	2-4' 32W T8 EB1-R	550	168	4804.8
79	Inline Electrical Resources	2-4' 34/40W hybrid	11	2-4' 32W T8-EB1	286	168	2498.496
79	Inline Electrical Resources	Exit Sign (2)40W-Inc	3	Exit Sign LED	225	168	1965.6
80	Inline Electrical Resources	100W Inc lamp	4	18W CF-HW	328	168	2865.408
80	Inline Electrical Resources	60W Inc lamp	17	18W CF-HW	680	60	2121.6
80	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	60	162.24
80	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	70	189.28
80	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	168	454.272
80	Inline Electrical Resources	60W Inc lamp	124	26W CF-HW	3720	45	8704.8
80	Inline Electrical Resources	Exit Sign (2)40W-Inc	4	Exit Sign LED	300	168	2620.8
81	Inline Electrical Resources	75W Inc lamp	18	18W CF-HW	1026	100	5335.2
81	Inline Electrical Resources	75W PAR-Inc	2	18W CF-HW	114	100	592.8
81	Inline Electrical Resources	75W Inc lamp	420	26W CF-HW	18900	45	44226
81	Inline Electrical Resources	Exit Sign (2)40W-Inc	5	Exit Sign LED	375	168	3276
82	Inline Electrical Resources	2-4' 34/40W hybrid	9	2-4' 32W T8-EB1	234	45	547.56
82	Inline Electrical Resources	2-4' 34/40W hybrid	9	2-4' 32W T8-EB1	234	55	669.24
82	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W T8-EB1	78	100	405.6
82	Inline Electrical Resources	2-8' 60/75W hybrid	3	2-4' 32W-T8-HPEB1-R	228	45	533.52
82	Inline Electrical Resources	2-8' 60/75W hybrid	6	2-4' 32W-T8-HPEB1-R	456	55	1304.16
82	Inline Electrical Resources	2-8' 60/75W hybrid	4	2-4' 32W-T8-HPEB1-R	304	84	1327.872

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Energy Analysis for all Completed Projects - 2 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
86	Inline Electrical Resources	60W Inc lamp	197	13W CF-HW	9259	45	21666.06
86	Inline Electrical Resources	60W Inc lamp	12	13W CF-HW	564	60	1759.68
86	Inline Electrical Resources	4-4' 34/40W hybrid	1	2-4' 32W-T8-HPEB1-R	96	60	299.52
88	Inline Electrical Resources	1-4' 34/40W hybrid	8	1-4' 32W-T8-HPEB1	112	84	489.216
88	Inline Electrical Resources	75W Inc lamp	70	18W CF-HW	3990	45	9336.6
88	Inline Electrical Resources	60W Inc lamp	2	19W CF-HW	80	45	187.2
88	Inline Electrical Resources	2-4' 34/40W hybrid	8	2-4' 32W-T8-EB1	208	45	486.72
88	Inline Electrical Resources	2-4' 34/40W hybrid	11	2-4' 32W-T8-EB1	286	84	1249.248
88	Inline Electrical Resources	2-8' 60/75W hybrid	2	2-4' 32W-T8-HPEB1	152	84	663.936
89	Inline Electrical Resources	60W Inc lamp	5	13W CF-HW	235	168	2052.96
89	Inline Electrical Resources	1-4' 34/40W hybrid	4	1-4' 32W-T8-EB1	78	84	331.968
89	Inline Electrical Resources	1-4' 34/40W hybrid	1	1-4' 32W-T8-EB1	19	168	165.984
89	Inline Electrical Resources	75W Inc lamp	325	15W CF-HW	19500	45	45630
89	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W-T8-EB1	78	45	182.52
89	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W-T8-EB1	52	70	189.28
89	Inline Electrical Resources	2-4' 34/40W hybrid	4	2-4' 32W-T8-EB1	104	84	454.272
89	Inline Electrical Resources	2-4' 34/40W hybrid	4	2-4' 32W-T8-EB1	104	140	757.12
89	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W-T8-EB1	78	168	681.408
89	Inline Electrical Resources	Exit Sign (2)40W-Inc	2	Exit Sign LED	150	168	1310.4
90	Inline Electrical Resources	100W Inc lamp	245	18W CF-HW	20090	60	62680.8
90	Inline Electrical Resources	65W PAR-Inc	50	18W CF-HW	2350	60	7332
100	Inline Electrical Resources	65W PAR-Inc	34	13W CF-HW	1768	84	7722.624
100	Inline Electrical Resources	65W PAR-Inc	306	13W CF-HW	15912	168	139007.254
104	Inline Electrical Resources	60 W Inc fixture	4	15W CF-Drum	180	84	786.24
104	Inline Electrical Resources	60W Inc lamp	10	15W CF-HW	450	100	2340
104	Inline Electrical Resources	4-4' 34/40W hybrid	4	2-4' 32W-T8 EB1-R	440	168	3843.84
104	Inline Electrical Resources	2-4' 34/40W hybrid	36	2-4' 32W-T8-EB1	936	84	4088.448
105	Inline Electrical Resources	60W Inc lamp	4	13W CF-HW	188	168	1642.368
105	Inline Electrical Resources	2-2' 34/40W U hybrid	2	2-2' 32W-T8U-EB1	30	168	262.08
105	Inline Electrical Resources	2-8' 60/75W hybrid	6	2-4' 32W-T8-HPEB1-R	456	168	3983.616
106	Inline Electrical Resources	60W Inc lamp	12	13W CF-HW	564	70	2052.96
106	Inline Electrical Resources	2-4' 34/40W hybrid	35	2-4' 32W-T8-EB1	910	70	3312.4

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD:

July through December 2009

### Energy Analysis for all Completed Projects - 3 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
107	Inline Electrical Resources	2-4' 34/40W hybrid	1	2-4' 32W T8-EB1	26	168	227.136
107	Inline Electrical Resources	2-8' 60/75W hybrid	23	2-4' 32W T8-HPEB1-R	1748	168	15270.53
108	Inline Electrical Resources	60W Inc lamp	19	13W CF-HW	893	168	7801.248
108	Inline Electrical Resources	1-4' 34/40W hybrid	6	1-4' 32W T8-EB1	114	70	414.96
108	Inline Electrical Resources	4-4' 34/40W hybrid	38	2-4' 32W T8 EB1-R	4180	70	15215.2
108	Inline Electrical Resources	2-4' 34/40W hybrid	34	2-4' 32W T8-EB1	884	70	3217.76
108	Inline Electrical Resources	Exit Sign (2)40W-inc	4	Exit Sign LED	300	168	2620.8
109	Inline Electrical Resources	4-4' 34/40W hybrid	86	2-4' 32W T8 EB1-R	9460	70	34434.4
109	Inline Electrical Resources	4-8' 60/75W hybrid	5	6-4' 32W T8-EB2	655	70	2384.2
109	Inline Electrical Resources	Exit Sign (2)40W-inc	4	Exit Sign LED	300	168	2620.8
110	Inline Electrical Resources	60W Inc lamp	8	13W CF-HW	376	60	1173.12
110	Inline Electrical Resources	75W Inc lamp	1	13W CF-HW	62	60	193.44
110	Inline Electrical Resources	4-4' 34/40W hybrid	14	2-4' 32W T8 EB1-R	1540	60	4804.8
111	Inline Electrical Resources	4-4' 34/40W hybrid	41	2-4' 32W T8 EB1-R	4510	60	14071.2
111	Inline Electrical Resources	Exit Sign (2)40W-inc	5	Exit Sign LED	375	168	3276
112	Inline Electrical Resources	60W Inc lamp	31	13W CF-HW	1457	60	4545.84
112	Inline Electrical Resources	4-4' 34/40W hybrid	12	2-4' 32W T8 EB1-R	1320	60	4118.4
112	Inline Electrical Resources	Exit Sign (2)40W-inc	6	Exit Sign LED	450	168	3931.2
113	Inline Electrical Resources	60W Inc lamp	4	13W CF-HW	188	53	518.128
113	Inline Electrical Resources	60W Inc lamp	6	13W CF-HW	282	84	1231.776
113	Inline Electrical Resources	65W PAR-inc	18	13W CF-HW	936	84	4088.448
113	Inline Electrical Resources	4-4' 34/40W hybrid	35	2-4' 32W T8 EB1-R	3850	55	11011
113	Inline Electrical Resources	2-4' 34/40W hybrid	1	2-4' 32W T8-EB1	26	55	74.36
113	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	84	227.136
113	Inline Electrical Resources	Exit Sign (2)40W-inc	3	Exit Sign LED	225	168	1965.6
114	Inline Electrical Resources	60W Inc lamp	10	13W CF-HW	470	50	1222
114	Inline Electrical Resources	4-4' 34/40W hybrid	23	2-4' 32W T8 EB1-R	2530	50	6578
114	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W T8-EB1	78	50	202.8
114	Inline Electrical Resources	2-8' 60/75W hybrid	6	2-4' 32W T8-HPEB1-R	456	50	1185.6

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Energy Analysis for all Completed Projects - 4 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
115	Inline Electrical Resources	60W Inc lamp	6	13W CF-HW	282	50	733.2
115	Inline Electrical Resources	75W Inc lamp	4	13W CF-SCRW	248	50	644.8
115	Inline Electrical Resources	150W PAR-Inc	48	23W CF-HW	6240	50	16224
115	Inline Electrical Resources	4-4' 34/40W hybrid	69	2-4' 32W T8 EB1-R	7590	50	19734
115	Inline Electrical Resources	2-4' 34/40W hybrid	14	2-4' 32W T8-EB1	364	50	946.4
116	Inline Electrical Resources	60W Inc lamp	5	13W CF-HW	235	45	549.9
116	Inline Electrical Resources	4-4' 34/40W hybrid	13	2-4' 32W T8 EB1-R	1430	45	3346.2
116	Inline Electrical Resources	2-4' 34/40W hybrid	24	2-4' 32W T8-EB1	624	84	2725.632
116	Inline Electrical Resources	2-4' 34/40W hybrid	15	2-4' 32W T8-EB1	390	168	3407.04
116	Inline Electrical Resources	Exit Sign (2)40W-Inc	4	Exit Sign LED	300	168	2620.8
117	Inline Electrical Resources	60W Inc lamp	22	13W CF-HW	1034	40	2150.72
117	Inline Electrical Resources	60W Inc lamp	261	13W CF-HW	12267	60	38273.04
117	Inline Electrical Resources	60W Inc lamp	3	13W CF-HW	141	70	513.24
117	Inline Electrical Resources	60W Inc lamp	12	13W CF-HW	564	168	4927.104
117	Inline Electrical Resources	75W Inc lamp	1	13W CF-HW	62	40	128.96
117	Inline Electrical Resources	75W Inc lamp	31	13W CF-HW	1922	60	5996.64
117	Inline Electrical Resources	75W Inc lamp	1	13W CF-HW	62	70	225.68
117	Inline Electrical Resources	4-4' 34/40W hybrid	25	2-4' 32W T8 EB1-R	2750	70	10010
117	Inline Electrical Resources	Exit Sign (2)40W-Inc	5	Exit Sign LED	375	168	3276
119	Inline Electrical Resources	60W Inc lamp	440	13W CF-HW	20680	60	64521.6
119	Inline Electrical Resources	60W Inc lamp	10	13W CF-HW	470	168	4105.92
119	Inline Electrical Resources	1-4' 34/40W hybrid	1	1-4' 32W T8-EB1	19	100	98.8
119	Inline Electrical Resources	2-4' 34/40W hybrid	4	2-4' 32W T8-EB1	104	100	540.8
119	Inline Electrical Resources	2-8' 60/75W hybrid	1	2-4' 32W T8-HPEB1-R	76	100	395.2
120	Inline Electrical Resources	100W Inc lamp	284	18W CF-HW	23288	60	72658.56
121	Inline Electrical Resources	60W Inc lamp	1	13W CF-HW	47	40	97.76
121	Inline Electrical Resources	60W Inc lamp	270	13W CF-HW	12690	60	39592.8
121	Inline Electrical Resources	60W Inc lamp	2	13W CF-HW	94	168	821.184
121	Inline Electrical Resources	4-4' 34/40W hybrid	4	2-4' 32W T8 EB1-R	440	30	686.4
121	Inline Electrical Resources	4-4' 34/40W hybrid	6	2-4' 32W T8 EB1-R	660	40	1372.8
121	Inline Electrical Resources	4-4' 34/40W hybrid	4	2-4' 32W T8 EB1-R	440	50	1144

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Energy Analysis for all Completed Projects - 5 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
122	Inline Electrical Resources	60W Inc lamp	5	13W CF-HW	235	50	611
122	Inline Electrical Resources	60W Inc lamp	412	13W CF-HW	19364	60	60415.68
122	Inline Electrical Resources	60W Inc lamp	1	13W CF-HW	47	100	244.4
122	Inline Electrical Resources	60W Inc lamp	3	13W CF-HW	141	168	1231.776
122	Inline Electrical Resources	Exit Sign (2)40W-Inc	8	Exit Sign LED	600	168	5241.6
123	Inline Electrical Resources	40W Inc lamp	201	13W CF-HW	5427	60	16932.24
123	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W T8-EB1	78	168	681.408
123	Inline Electrical Resources	2-8' 60/75W hybrid	1	2-4' 32W T8-HPEB1	76	168	663.936
124	Inline Electrical Resources	60W Inc lamp	4	13W CF-HW	188	40	391.04
124	Inline Electrical Resources	60W Inc lamp	52	13W CF-HW	2444	60	7625.28
124	Inline Electrical Resources	60W Inc lamp	9	13W CF-HW	423	84	1847.664
124	Inline Electrical Resources	60W Inc lamp	1	13W CF-HW	47	168	410.592
124	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	100	270.4
125	Inline Electrical Resources	75W Inc lamp	13	13W CF-HW	806	84	3520.608
125	Inline Electrical Resources	75W Inc lamp	4	18W CF-HW	228	84	995.904
125	Inline Electrical Resources	4-4' 34/40W hybrid	6	2-4' 32W T8 EB1-R	660	168	5765.76
125	Inline Electrical Resources	2-4' 34/40W hybrid	5	2-4' 32W T8-EB1	130	50	338
125	Inline Electrical Resources	2-4' 34/40W hybrid	8	2-4' 32W T8-EB1	208	84	908.544
125	Inline Electrical Resources	2-4' 34/40W hybrid	4	2-4' 32W T8-EB1	104	168	908.544
125	Inline Electrical Resources	2-8' 60/75W hybrid	11	2-4' 32W T8-HPEB1-R	836	84	3651.648
125	Inline Electrical Resources	Exit Sign (2)40W-Inc	16	Exit Sign LED	1200	168	10483.2
129	Inline Electrical Resources	75W Inc lamp	347	13W CF-HW	21514	65	72717.32
130	Inline Electrical Resources	60W Inc lamp	416	13W CF-HW	19552	65	66085.76
131	Inline Electrical Resources	75W Inc lamp	513	18W CF-HW	29241	65	98834.58
135	Inline Electrical Resources	60W Inc lamp	1	13W CF-HW	47	35	85.54
135	Inline Electrical Resources	2-4' 34/40W hybrid	1	1-4' 32W T8-EB1-BC	53	100	275.6
135	Inline Electrical Resources	4-4' 34/40W hybrid	90	2-4' 32W T8 EB1-R	9900	100	51480
135	Inline Electrical Resources	2-4' 34/40W hybrid	2	2-4' 32W T8-EB1	52	60	162.24
135	Inline Electrical Resources	2-4' 34/40W hybrid	59	2-4' 32W T8-EB1	1534	90	7179.12
135	Inline Electrical Resources	2-8' 60/75W hybrid	2	2-4' 32W T8-HPEB1-R	152	70	553.28
135	Inline Electrical Resources	2-8' 60/75W hybrid	18	2-4' 32W T8-HPEB1-R	1368	90	6402.24
135	Inline Electrical Resources	Exit Sign (2)40W-Inc	2	Exit Sign LED	150	168	1310.4

# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### Energy Analysis for all Completed Projects - 6 of 6

PROPOSAL ID	CONTRACTOR NAME	EXISTING DESCRIPTION	REPLACEMENT QUANTITY	REPLACEMENT DESCRIPTION	WATTS SAVED	EXISTING HOURS USE PER WEEK	ANNUAL KWH SAVINGS
139	Inline Electrical Resources	2-8' 60/75W hybrid	24	2-4' 32W-T8-HPEB1-R	1824	96	9076.953
145	Devault Electric	400W MH	169	4-4' 54W T5 EB2	37349	168	326280.9
146	Devault Electric	3-4' 34/40W hybrid	2438	3-4' 32W-T8-LPEB1	138966	60	433574
146	Devault Electric	400W MH	60	4-4' 54W T5 EB2	13260	50	34476
146	Devault Electric	Exit Sign (2)25W-Inc	111	Exit Sign LED	4995	168	43636.32
147	Inline Electrical Resources	4-4' 34/40W hybrid	60	2-4' 32W T8 EB1-R	6600	55	18876
147	Inline Electrical Resources	2-8' 60/75W hybrid	1	2-4' 32W-T8-HPEB1-R	76	30	118.56
147	Inline Electrical Resources	2-8' 60/75W hybrid	1	2-4' 32W-T8-HPEB1-R	76	55	217.36
148	Inline Electrical Resources	4-4' 34/40W hybrid	15	2-4' 32W T8 EB1-R	1650	55	4719
148	Inline Electrical Resources	Exit Sign (2)40W-Inc	2	Exit Sign LED	150	168	1310.4
155	Inline Electrical Resources	75W Inc lamp	2	13W CF-HW	124	72	464.256
155	Inline Electrical Resources	2-8' 60/75W hybrid	65	2-4' 32W-T8-HPEB1-R	4940	72	18495.36
156	Inline Electrical Resources	75W Inc lamp	2	13W CF-HW	124	20	128.96
156	Inline Electrical Resources	2-4' 34/40W hybrid	3	2-4' 32W T8-EB1	78	20	81.12
156	Inline Electrical Resources	2-4' 34/40W hybrid	9	2-4' 32W T8-EB1	234	47	568.854
156	Inline Electrical Resources	2-8' 60/75W hybrid	12	2-4' 32W-T8-HPEB1-R	912	55	2608.32
156	Inline Electrical Resources	4-8' 60/75W hybrid	4	6-4' 32W-T8-HPEB2	452	47	1098.812
159	Inline Electrical Resources	60W Inc lamp	5	13W CF-HW	235	35	427.7
159	Inline Electrical Resources	60W Inc lamp	18	13W CF-HW	846	60	2639.52
159	Inline Electrical Resources	60W Inc lamp	6	13W CF-HW	282	72	1055.808
159	Inline Electrical Resources	60W Inc lamp	1	13W CF-HW	47	84	205.296
159	Inline Electrical Resources	75W Inc lamp	9	15W CF-SCRW	540	84	2358.72
159	Inline Electrical Resources	100W Inc lamp	11	18W CF-HW	902	72	3377.088
159	Inline Electrical Resources	4-4' 34/40W hybrid	10	2-4' 32W T8 EB1-R	1100	72	4118.4
159	Inline Electrical Resources	2-4' 34/40W hybrid	8	2-4' 32W T8-EB1	208	72	778.752
159	Inline Electrical Resources	2-8' 60/75W hybrid	22	2-4' 32W-T8-HPEB1-R	1672	72	6259.968
159	Inline Electrical Resources	Exit Sign (2)40W-Inc	1	Exit Sign LED	75	168	655.2
162	Devault Electric	2-8' HO hybrid	28	4-4' 32W-T8-EB1-BC	3304	45	7731.36
162	Devault Electric	400W MH	30	4-4' 54W T5 EB2	6630	45	15514.2
166	Devault Electric	400W MH	523	4-4' 54W T5 EB2	115683	105	631083.2
TOTAL KWH SAVINGS							2,942,276



# UNS Electric, Inc.

## SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009

### APPENDIX 1 – CFL SALES AND WATTAGE INFORMATION FOR CALENDAR YEAR 2009

#### CFL Sales by City & Retailer

Product Type	Retailer	Units	kWh Annual
<b>Kingman</b>			
CFL	Bashas	80	3,777
CFL	Dollar Tree	1,806	85,258
CFL	Home Depot	45,400	2,014,576
CFL	Outreach	3,004	161,398
CFL	Walmart	2,439	120,310
<b>Kingman Total</b>		<b>52,729</b>	<b>2,385,319</b>
<b>Lake Havasu</b>			
CFL	Bashas	226	10,669
CFL	Home Depot	42,152	1,879,957
<b>Lake Havasu Total</b>		<b>42,378</b>	<b>1,890,626</b>
<b>Lake Havasu City</b>			
CFL	Ace Hardware	3,410	170,577
CFL	CVS	160	7,614
CFL	Lowe's	2,151	136,136
CFL	Walmart	1,700	83,561
<b>Lake Havasu City Total</b>		<b>7,421</b>	<b>397,887</b>
<b>Nogales</b>			
CFL	Bashas	2	94
CFL	Dollar Tree	1,794	84,691
CFL	Home Depot	61,032	2,773,858
CFL	Walmart	5,752	319,149
<b>Nogales Total</b>		<b>68,580</b>	<b>3,177,793</b>
<b>Utility Total</b>		<b>171,108</b>	<b>7,851,626</b>

#### kWh Savings by Wattage

Product Type	Units	Watts	Watts Replaced	Watts Saved	Life	Hours/Day	Meas Life	Unit kWh Annual	kWh Annual
CFL	35	9	40	31	8,000	2.75	8.0	31.1	1,090
CFL	20,678	9	40	31	10,000	2.75	10.0	31.1	643,851
CFL	2,535	10	40	30	8,000	2.75	8.0	30.1	76,385
CFL	8,268	13	60	47	8,000	2.75	8.0	47.2	390,316
CFL	4,048	13	60	47	10,000	2.75	10.0	47.2	191,098
CFL	2,644	14	60	46	8,000	2.75	8.0	46.2	122,161
CFL	3,986	14	65	51	8,000	2.75	8.0	51.2	204,183
CFL	117,896	14	60	46	10,000	2.75	10.0	46.2	5,447,149
CFL	96	15	60	45	8,000	2.63	8.3	43.2	4,146
CFL	376	15	60	45	8,000	2.75	8.0	45.2	16,995
CFL	21	15	65	50	8,000	2.75	8.0	50.2	1,055
CFL	97	16	65	49	8,000	2.75	8.0	49.2	4,774
CFL	1,138	19	75	56	10,000	2.75	10.0	56.2	64,009
CFL	2,232	20	75	55	8,000	2.75	8.0	55.2	123,302
CFL	58	20	85	65	8,000	2.75	8.0	65.3	3,787
CFL	25	23	100	77	8,000	2.11	10.4	59.3	1,482
CFL	3,435	23	100	77	8,000	2.75	8.0	77.3	265,663
CFL	24	23	120	97	8,000	1.93	11.4	68.3	1,639
CFL	404	23	120	97	8,000	2.75	8.0	97.4	39,361
CFL	2,150	23	100	77	10,000	2.75	10.0	77.3	166,281
CFL	655	26	100	74	8,000	2.75	8.0	74.3	48,684
CFL	70	29	150	121	10,000	2.75	10.0	121.5	8,507
CFL	237	42	150	108	10,000	2.75	10.0	108.5	25,709
<b>Utility Total</b>		<b>171,108</b>							<b>7,851,626</b>

## **UNS Electric, Inc.**

### **SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2009**

#### **APPENDIX 2 – MARKETING MATERIALS**

##### **Energy Smart Homes:**

- 7\_28\_09Builders Don't Miss These Key Events! (HTM)
- UES Home Signs 8 (PDF)

##### **Education and Outreach Programs:**

- Carbon Footprint Calculator
  - Web – CO2calculatorhomepage (Word document) and How Green Are You (JPG)
- Phantom Kilowatt
  - Bill Insert – UES Phantom Energy insert v3FINAL (PDF)
  - Web – KilowattCounterhomepage (Word document) and Phantom Energy home page (Word document)
    - Ebill banner – UES Phantom ebill banner (JPG)
- PowerShift TOU
  - Bill insert – UNSE PowerShift insert v1 (PDF)
  - Print Ad – UNSE PowerShift ad v1 (PDF)
  - Radio – UES Powershift TOU Radio 60 9\_16\_09 (MP3)
  - Web:
    - Ebill banner – UES PowerShift ebill banner v1 (JPG)
    - Marketing icon – Power Shift Winter Rates UES (JPG)

##### **ENERGY STAR® Lighting:**


- Bill insert – UES\_bill\_insert\_v5FINAL (PDF)
- Brochure – Collateral (PDF) and UES Bright Solutions brochure v3 (PDF)
- One Pager – UES\_one-pager\_11x17\_eng (PDF)
- Press Release – UES ENERGY STAR Release 1-28-09 (Word document)
- Print Ads – Tep-UES Ads\_print\_11.16 (PDF), UES\_Event\_3x10 (PDF), and UES\_General\_3x10 (PDF)
- Radio copy – content\_TEP\_UES\_radio\_scripts (Word document)

##### **Shade Tree – Trees for You:**

- UES Trees4You appl (PDF) and UES Trees 4 U ad v3 (PDF)

**STATE OF ARIZONA            )**  
   **) ss.**  
**COUNTY of PIMA              )**

David G. Hutchens, upon his oath, certifies that to the best of his knowledge, the labor and other expenses charged to UNS Electric, Inc.'s Demand-Side Management Programs approved in Decision Nos. 70522, 70523, 70524 and 70556 are incremental costs that are not being recovered in base rates.

  
David G. Hutchens  
Vice President, Energy Efficiency and  
Resource Planning

SUBSCRIBED AND SWORN to me before this 29 day of March 2010.



*Jacques M. Merin*  
Notary Public

**My Commission Expires:**

6/10/2010

# Memos of Understanding

CONFIDENTIAL